Discussion:
Data inventory, access and data gaps

IMPACT Workshop
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Miami, FL

Data Wish List

- **Spatial Coverage:**
  - Surface data sets: South Florida and adjacent waters including FKNMS
  - In situ/point data sets: Within or immediately adjacent to FKNMS, or relevant area (e.g. within the loop current system)
- **Spatial Resolution (surface only):** >= 25km
- **Temporal Coverage:** 10 years min; 30+ years ideal
- **Temporal Resolution:** monthly min; daily+ ideal

Data Wish List, continued

- **Variables:**
  - Atmospheric: radiation, temperature, humidity, precip, winds, pressure, storms, clouds, composition, vertical profile variables
  - Oceanographic: SST, T_d, currents, salinity, pH, transmissivity, waves, chemistry, tides, SSH
  - Biological: species counts, habitat extent, composition
- **Free of access restrictions**

Data Wish List: Focus

- **Variables:**
  - Atmospheric: precip, light, storms, temperature
  - Oceanographic: ocean warming, circulation, freshwater inflow/water quality
  - Biological: invasive species, disease, relevant to fishing

Data Sources (what we have)

Atmospheric, Phys. Oceanographic
Fixed Platform NDBC buoys SEAKEY 30 FKNMS thermographs (bottom) Sea Level Station at Key West (since 1913)
Underway/Shipboard SEFSC survey data AOML Florida Bay surveys (salinity) 2556 World Ocean Database profiles AOML SEAS
Remote Sensing USF high res SST, TSM URI 1km Pathfinder SST NODC/UMiami 4km Pathfinder SST High Frequency Radar (4 stations) Jason-2, GEOSAT altimetry missions
Derived products AOML surface currents AOML air-sea flux CO2 maps NCEP model output (currents, temp, sal)

Biological, Chemical
In situ/surveys FL Reef Resilience Program (bleaching) FKNMS Seagrass Monitoring SEFSC survey data AOML nutrient analysis 154 FKNMS water quality stations NODC Marine & Shellfish surveys NODC Toxic Substances & Pollutants data Harmful Algal Bloom database, 1954-1988 pH from Dwight Gledhill?
Satellite USF high res ocean color MERIS 1km ocean color?

Atmospheric: radiation, temperature, humidity, precip, winds, pressure, storms, clouds, composition, vertical profile variables

Oceanographic: SST, Td, currents, salinity, pH, transmissivity, waves, chemistry, tides, SSH

Biological: species counts, habitat extent, composition

Data Gaps (what we don't have)

- **Where are the data gaps?**
  - Spatial coverage and resolution
  - Temporal coverage and resolution
  - Variables
- **How can we fill these gaps, or get around them if we can't?**

Other Issues

- How do we decide what to use and what not to use?
- Data for baseline climatologies vs. data for operational climate tools
- Logistics: How and where do we serve this data for the duration of the project? And beyond?